NOTES ON MAMMALS

Collected by Dr. Christy in the Congo and by Dr. Bayer in Uganda and British East Africa

BY

Guy DOLLMAN

British Museum (Natural History).

The following paper deals with a collection of Mammals recently received by the Congo Museum, Tervueren, from the Congo, Uganda and British East Africa.

Thorough the kindness of the authorities at Tervueren the entire collection was sent to the British Museum to be worked out, and I have thus had the opportunity of comparing all the specimens with those in the cabinets of the British Museum.

I. — CONGO COLLECTION.

The following is a list of the small mammals collected in the Congo by Dr. Christy during his expedition on behalf of the Congo Museum, Tervueren.

It has been found necessary to describe three new forms, one of which, a Dormouse, I have been pleased to name after the collector. Another interesting novelty, *Epimys schoutedeni*, I have

called after Dr. H. Schouteden of the Congo Museum, to whom my best thanks are due for the opportunity of working out this valuable collection.

1. — Galago thomasi Elliot.

- o. 259. Makala.
- Q. 438, 442. Mambaka.

ELLIOT'S type was obtained by Mr. R. B. WOOSNAM at Fort Beni on the Semiliki River. Dr. Christy's specimens agree very closely with the type and other individuals of this species in the British Museum Collection.

2. - Epomops franqueti Tomes.

- J. 29, 32, 36; Q.28, 33. Stanleyville.
- Q. 193, 196. Avakubi.
- ♂. 431; Q.411. Mambaka.

3. — Hipposiderus cyclops Temm.

Q. 206, 207. Avakubi.

4. — Hipposiderus caffer Sund.

5. — Nycteris hispida Schreb.

104, 197. Avakubi.

J. 226. Fundi.

Q. 257. Makala.

6. — Kerivoula cuprosa Тноз.

Q. 136, 138, and two young ones, Avakubi.

7. — Taphozous mauritianus E. Geoff.

c. 38. Stanleyville.

8. — Potamogale velox Puch.

J. 365. Fundi.

9. — Crocidura turba Dollm.

Q. 101, 102. Avakubi.

In general colour these two Shrews are exactly similar to the series collected by Mr. S. A. Newe in Northern Rhodesia, upon which the species was founded.

10. - Genetta victoriae Thos.

Q. 518. Mawambi.

The type locality of this handsome species is Entebbe, Uganda; skins have recently been received from the Ituri Forest and on comparing these with the type and Dr. Christy's specimen from Mawambi it is surprising to see how constant and unvaried the general coloration is.

11. — Genetta aequatorialis Heuglin.

J. 51. Tshoppo Falls.

12. — Mungos gracilis Rüpp.

R. G. 1249. Katanga (SHARPE).

13. — Mungos paludinosus G. Cuv.

J. 52. Tshoppo Falls.

This specimen is evidently not more than a few weeks old and has not yet assumed the dark colouring of the adult pelage.

14. — Anomalurus jacksoni de Wint.

Q. 143. Avakubi.

Q. 391, 401. Mambaka.

Anomalurus jacksoni, founded by DE WINTON on a specimen from Entebbe, Uganda, also occurs in British East Africa and the Congo; in the British Museum Collection there are specimens from the Kakugmega Forest (B. E. A.), Unyoro, Entebbe, Gambi, Baraka and Panga.

15. — Anomalurus neavei Dollm.

R. G. 1956. Katanga, Elisabethville (LEBOUTTE).

It is interesting to record this species from Elisabethville, Katanga; the type was obtained by Mr. S. A. Neave near Kambove, Katanga. In the specimen now before me the small size of the caudal scales, an important diagnostic character of the species, is most marked; in general colour and dimensions the skin agrees very closely with that of the type.

16. — Heliosciurus rufobrachiatus semiliki Thos.

J. 144; Q. 198. Avakubi.

Q. 43. Tshoppo Falls.

This race was described by Thomas from a specimen collected by Mr. Dent at Fort Beni, on the Semiliki River.

17. — Funisciurus pyrrhopus anerythrus Thos.

J. 164. Avakubi.

Q. 24. Lukolela.

Funisciurus p. anerythrus was founded by Thomas on two specimens collected by EMIN PASHA at Buguera. Dr. Christy's three skins are quite similar to the type and other specimens of this Squirrel in British Museum Collection.

18. — Funisciurus pyrrhopus akka de Wint.

Q. 355, 367. Fundi.

This Squirrel, like Funisciurus pyrrhopus anerythrus, was also described from the Emin Pasha Collection; the type locality being Tingasi, Monbuttu. Externally it is distinguished from anerythrus by its almost pure white underparts and more richly coloured limbs and head.

19. - Paraxerus cepapi quotus WROUGHT.

1769 A, 1769 B. Katanga.

Paraxerus cepapi quotus was first obtained by Mr. Neave on the Diknlwe River in Katanga. Since Wroughton described this race a further specimen has been collected by Mr. Neave in the Loangwa Valley, Northern Rhodesia; it is probable that quotus extends as far South as the Zambesi, gradually passing into the more Southern race, Paraxerus cepapi sindi.

20. — Paraxerus boehmi emini Sтини.

o. 142. Avakubi.

This handsome little Squirrel evidently enjoys a wide distribution; the British Museum Collection contains specimens from the following localities: Tingasi (Monbuttu), Kibali River, Mobbai, Gudima (Iri River), Mabira Forest (Uganda), Entebbe, Ruwenzori, Semiliki, Mpanga Forest, Tanganika, Mt. Mikeno (Congo), and Lake Kivu. Like the other species and subspecies of this group, *P. b. emini* is very constant as regards the general colouring, there being no appreciable variation in any of the skins examined.

21. — Protoxerus stangeri centricola Thos.

J. 250. Makala.

♂. 199; Q. 179. Avakubi.

In spite of the great differences in colour between these three specimens I see no reason to assume that there represent more than one form, the discrepancies in colour being due to the natu-

ral bleaching of the hair. Thus skin no. 250 is a very dark specimen without any signs of bleaching. In no. 199 the dorsal region is richly washed with a rich rusty red tint; and in no. 179 the entire appearance of the animal is altered, the coat being considerably shorter and the general colour bleached to a dirty yellowish buff. The type locality of *centricola* is Katabi, Entebbe.

22. — Graphiurus christyi sp. n.

♂. 433, 444; Q. 419, 446, 448. Mambaka. Q. 215. Mambo.

Related to *Graphiurus spurrelli* Dollm., similar in colour and size but differing in the general form of the skull.

General proportions as in the Gold Coast species.

Colour of dorsal surface dark slate-grey washed with pale brownish buff, between « Hair Brown » and « Mouse Grey » (Ridgway, 1912). Flanks similar in colour, the brownish tint passing rather abruptly into the slate-grey of the ventral surface. Eyes surrounded with well marked dark rings. Cheeks, below eyes, pale greyish white. Backs of hands and feet brownish, toes dirty white. Entire ventral surface dark slate-grey washed with greyish white. Tail pale liver-brown.

Skull with larger brain case and broader nasals, not narrowing posteriorly in such an abrupt manner as in *spurrelli*. Cheek teeth rather larger.

The following are the dimensions of no. 444, which may be taken as typical (skin dimensions taken in the flesh).

Head and body 105 mm.; tail 75; hind foot 18; ear 12.

Skull: Greatest length 27.5 mm.; basilar length 19.8; condyloincisive length 24: zygomatic breadth 15; interorbital constriction 4.9; squamosal breadth across brain case 12.6; length of nasals 9.8; greatest breadth across nasals 3.6; palatilar length 8.1; length of palatal foramina 2.6; length of upper cheek teeth 3.3.

In general colour Dr. Christy's Dormouse is very like the Gold Coast species, but rather darker throughout, with darker rings around the eyes and more richly coloured hands and feet.

23. — Deomys ferrugineus Thos.

J. 441. Mambaka.

Only one specimen of this interesting rat was obtained by Dr. Christy; it is in every way similar to the specimens collected by Mr. Bates in the Cameroons and on the Benito River.

24. - Epimys sebastianus DE WINT.

- o. 336, 374; o. 341. Fundi.
- ♂. 279, 283; Q. 273. Pilipili.
- o. 394. Mambaka.

The type locality of *sebastianus* is Efulen, Cameroons; since DE WINTON described this species a large number of specimens have been added to the British Museum Collection, mostly collected by Mr. Bates in the Cameroons and on the Benito River. This series of Dr. Christy's presents exactly the same characters as were originally described by DE WINTON from the alcholic type, and also agrees very closely with the Bates series of skins as regards the general colonr.

25. — Epimys rattus L.

- ♂. 7, 19, 20, 22; Q. 13, 15. Leopoldville.
- Q. 141, 209, 210. Avakubi.
- o. 238. Makala.
- ♂. 45; Q. 42, 44, 54, 55. Tshoppo Falls.

26. — Epimys tulbergi Thos.

- d. 348, 371, 375. Fundi.
- o. 298. Pilipili.
- ♂. 427; Q. 396. Mambaka.
- ♂. 135, 167, 168; Q. 163. Ayakubi.
- o. 80, 85. Bafwasende.
- Q. 75. Bafwadi.

27. — Epimys schoutedeni sp. n.

d. 412, 434, 436. Mambaka.

A bright orange-rufous coloured mouse related to *Epimys acta* Thos, distinguished by its more rufous colouring, much larger size and heavier skull.

Body dimensions considerably greater than in *acta*; tail rather short compared with that of the Cameroon species.

General colour of dorsal surface bright orange-rufous slightly darker on the back than on the flanks. Hairs of back with slate-grey bases, orange-coloured subterminal rings and brownish tips; on the flanks the tips of the hairs are in most cases yellowish buff. Backs of hands and feet dirty white. Entire ventral surface white; hairs of belly slate-grey with long white tips. The light-coloured belly is sharply marked off from the buff-tinted flanks. Tail thinly clad with short brown hairs.

Skull built on the same lines as that of acta, but larger and heavier throughout.

Dimensions of no. 434, which may be considered as typical of this new species.

Skin (measured in the flesh).

Head and body 110 mm.; tail 125; hind-foot 20; ear 17.

Skull: Greatest length 29 mm.; condylo-incisive length 27; zygomatic breadth 14.1; interorbital constriction 47; breadth of brain case 11.5; length of nasals 10.3; palatilar length 12.8; length of palatal foramina 6; alveolar length of upper molar series 4.5.

The two specimens of this interesting novelty submitted to me are identical both in colour and size. Epimys stella Thos., described from the Ituri Forest, is evidently not so nearly related to this new form as is the Cameroon species. E. stella, though similar in general colouring, possesses a very much narrower and slighter skull than either acta or the Mambaka species; in addition the tail is of exceptional length, being nearly twice as long as the head and body. The larger size, more rufous colouring and heavier skull are the chief characters that distinguish Dr. Christy's mouse from acta.

28. — Epimys ugandae DE WINT.

d. 335. Fundi.

o. 239, 248; Q. 240, 246. Makala.

J. 112, 115, 124, 128; Q. 113, 140, 208. Avakubi.

o. 69. Bafwadi.

29. — Epimys microdon Pet.

1499 A, 1499 B, 1499 C. Bukama (Dr. RODHAIN).

30. — Thamnomys rutilans centralis subsp. n.

♂. 402, 405, 422, 428; Q. 423. Mambaka.

o. 357, 361; Q. 343, 380. Fundi.

Q. 281. Pilipili.

Closely allied to *Thannomys rutilans* Per., distinguished by its smaller size and less rufous colouring.

General dimensions of body rather less than in rutilans, tail

Colour of dorsal surface more as in the East African members of the genus, without the rich rufous tints so conspicuous in rutilans. Hairs of back slate-grey with yellowish buff tips; a large number of rather longer black hairs, with or without pale yellow tips, evenly dispersed over the whole dorsal surface and flanks. These black hairs are much more abundant than in rutilans and, together with the paler colour of the hair-tips, give to the pelage a general dull appearance. Flanks slate-grey washed with yellowish buff, the buff-coloured tips forming a pale yellowish line between the dark flanks and white ventral surface. Under surface of body as in rutilans, rather less richly tinted with buff.

Skull smaller and slighter in build, with shorter nasals and less conspicuous supra-orbital ridges.

The following are the skin and skull dimensions of no. 361 which has been chosen as typical of this race:

Head and body 135 mm.; tail 180; hind-foot 24; ear 16 (measured in the flesh).

Skull: Greatest length 32.5 mm.; condylo-incisive length 29; zygomatic breadth 15.2; interorbital constriction 5.2; length of nasals 11.6; squamosal breadth of brain case 12.5; palatilar length 13.6; length of palatal foramina 6.5; alveolar length of upper molar series 5.2.

The general dull colour of the pelage and rather smaller dimensions are the chief characters that separate this Congo race from the true *Thamnomys rutilans*.

31. — Cricetomys gambianus emini Wrought.

Q. 211. Pilipili.

The type locality of *Cricetomys gambianus emini* is Monbuttu, this race having been founded by Wroughton on a series of these Giant Rats collected by Emin Pasha.

32. — Hybomys univittatus Pet.

- Q. 352, 369. Fundi.
- o. 383; o. 384, 387. Mambaka.
- d. 278, 293, 297, 302, 313; Q. 324. Pilipili.
- o. 87; o. 98. Bafwasende.

The striking effect produced by bleaching is seen to advantage in this series of skins. Skins nos. 278, 293, 302, and 324 represent the new and unbleached pelage, the colour of which is dark olivebuff with the black median stripe well-defined. In nos. 297, 313, 352, 383, and 384 the olive tint has disappeared and the general colour is very much richer, the dorsal surface appearing as rusty red and the dark median stripe less pronounced. In the most extreme case, no. 369 the pelage is pale rusty orange without any trace of the dark median stripe.

33. — Aenomys hypoxanthus Puch.

- ♂. 280; Q. 300, 301. Pilipili.
- o. 340. Fundi.
- ♂. 103, 117, 120, 121, 129, 157; Q. 123, 195, 212. Avakubi.

- J. 62; Q. 61. Bolongena.
- o. 91, 94. Bafwasende.

34. — Malacomys centralis DE WINT.

- o. 276, 305, 307, 329; Q. 275, 277, 306, 309. Pilipili.
- o. 354; o. 372. Fundi.
- Q. 413. Mambaka.

This series of skins exhibits the striking range of colour variation met with in this species, some of the skins being dark brownish grey while others are bright rust-red in colour, due to the bleaching of the dark hair tips to a rusty tint.

35. — Lophuromys rita Dollm.

o. 304. Pilipili.

A rather bleached individual of the Katanga *Lophuromys;* the type of this species is a specimen collected by Mr. S. A. Neave on the Lufupa River, Katanga, further specimens have since been obtained from various localities in Northern Rhodesia.

36. — Arvicanthis striatus L.

- o. 111, 118, 148, 161, 211; Q. 151, 175, 188. Avakubi.
- o. 243. Makala.
- o. 56, 57. Bula.

37. — Georychus lechei Thos.

R. G. 1313. Uelé (Ct. HUTEREAU).

Georychus lechei was founded by Thomas on two specimens collected by Emin Pasha in Monbuttu. In addition, there are in the British Museum Collection, three further specimens of this Georychus, two from Gudima, Iri River, and one from Magombo, 60 miles West of Lake Albert, collected by the late Captain BOYD ALEXANDER.

38. - Procavia emini latrator Thos.

1587. Itmi.

The type locality of latrator is the Upper Sankuru River.

II. - KASINDI AND UGANDA COLLECTIONS.

The following is a list of the small mammals collected by Dr. BAYER at Kasindi and Karemi, Belgian Congo, and in Uganda.

1. — Otomys dartmouthi Thos.

1124. Kasindi.

2. — Epimys ugandae DE WINT.

1125, 1128, 1132, 1133, 1136. Karemi.

In general dimensions these mice are quite similar to the adult specimens of *ugandae* in the British Museum; the type of this species is, unfortunately, quite a young individual, and this fact has already given rise to considerable misunderstanding as regards the exact affinities of the species.

3. - Epimys rattus L.

1126, 1127, 1129, 1130, 1131. Karemi.

1123. Kikoma.

1137. Mahokia.

4. — Arvicanthis rubescens Wrought.

1134, 1135. Karemi.

1120, 1122. Mahokia.

1118, 1138. Kikorongo.

1119. Kasindi.

These Uganda Field Rats would appear to be some of the commonest mammals in the Protectorate; Mr. Kemp, during his

recent collecting trip in Uganda, collected a very large series of this species. Arvicanthis rubescens appears to occur over a very large area, the British Museum Collection containing specimens from the following localities: Nimule, Bakoro, Patong, Kozibiri River, Unyoro, Ankole, Masaka, Entebbe, Kigezi, Kagambah, Mbarara, Nalasanji, Ruwenzori, and Busuenda.

5. — Mylomys cuninghamei Thos.

R. G. 1121. Butiti, Uganda.

This interesting rat has already been recorded from Uganda, Dr. Christy having collected a specimen in the Mabira Forest, Chagwe, some five or six years ago. Mr. Robin Kemp also obtained this species in Southern Uganda, near Lake Mutanda, and while working out his Uganda collection I was unable to find any characters of systematic value wherein the Uganda individuals differed from the type, a specimen collected by Mrs. Holms Tarn in British East Africa. The skin of the specimen obtained by Dr. Bayer at Butiti shows to advantage the characteristic white ventral surface which immediately distinguishes this genus from the closely allied Pelomys, where the ventral surface is dirty vellow or grevish and never so sharply marked off from the dark coloured flanks as in Mylomys. The skull of Dr. BAYER's specimen is unfortunately badly broken, but the cheek teeth are in position and the large recurved molar cusps, the chief generic character, are most conspicuous.

III. — BRITISH EAST AFRICAN COLLECTION.

The mammals treated with in the following list were collected on or near the Tsavo and Sebaki Rivers, British East Africa, by Dr. Bayer.

1. — Galago braccatus Elliot.

♂. R. G. 2070. Marabou, B. E. A.

ELLIOT's species was founded on a specimen from the Tsavo River, and agrees exactly in general colour and dimensions with this Marabon Galago.

2. — Epomophorus anurus Heuglin.

R. G. 2095. Sebaki River, B. E. A.

3. - Cardioderma cor Pet.

R. G. 2094. Sebaki River, B. E. A.

4. — Elephantulus rufescens Pet.

Q. 94, 95. Zuwani Swamp, B. E. A.

In general colour and size these two specimens agree very closely with a topotype of *rufescens* in the British Museum Collection. The type locality of the species is Ndi, Taita; it is evidently distributed over a wide area as Mr. Kemp collected *rufescens* in many localities.

5. — Crocidura turba provocax Thos.

Q. 1, 93. Zuwani Swamp.

6. — Crocidura jacksoni Thos.

♂. 32; Q. 21, 23, 25. Tsavo River.

J. 56, 72, R. G. 2087; Q. 52, 67. Zuwani.

7. — Genetta erlangeri Matsch.

J. 52. Zuwani, B. E. A.

8. — Helogale undulata rufula Thos.

o. 73. Zuwani, B. E. A.

9. - Mungos albicauda G. Cuy.

Q. 29. Tsavo River.

10. - Xerus dabagala dorsalis Dollm.

♂. 42; Q. 44. Tsavo River.

J. 74. Zuwani.

11. — Dipodillus harwoodi Thos.

Q. 19. Tsavo.

This specimen, the only one obtained, is not fully adult. *Dipodillus harwoodi* was described by Thomas from a specimen collected by Mr. L. C. Harwood near Lake Naivasha. Quite recently there has been added to the British Museum Collection a specimen of this diminutive Gerbil from the Southern Guaso Nyiro, so the species is probably widely distributed over the Southern parts of British East Africa.

12. - Tatera nigricauda Pet.

Q. 89. Tsavo.

This specimen exhibits to advantage the black-haired tail so characteristic of this Gerbil. It would appear to be found over most of the Southern parts of British East Africa; in the North, along the Northern Guaso Nyiro, it is replaced by *T. nigricauda nyama*, a paler form, but still possessing a dark coloured tail.

13. — Tatera vicina Рет.

Q. 18, 22, 24. Tsavo.

At once distinguished from the fore going species by its smaller size and the light under surface of the tail.

14. — Mus bellus Thos.

Q. 13. Tsavo.

15. — Epimys panya Hell.

o. 75; Q. 78. M'kuvw River, B. E. A.

16. — Epimys niveiventris Osc.

- J. 6; φ. 1. Tsavo.
- J. So. Zuwani.

The type locality of *Epimys niveiventris* is Voi; there is no difference between these three specimens and topotypes in the British Museum.

17. — Acomys ignitus Dollin.

- o. 7. Tsavo.
- o. 87. Zuwani.
- 6. (immature) R. G. 2089, 2090. Tsavo.

Both the adult individuals are rather paler than the type of *ignitus*, but there are specimens in the Museum Collection from Voi, the type locality, quite as pale in general colour as these from Tsayo and Zuwani.

Acomys wilsoni Thos.

- J. 96. Tsavo.
- J. 88; o. 64. Zuwani.

These three specimens agree quite well with the large series recently collected by Mr. Kemp at Voi. The type, from Mombasa, is preserved in alcohol.